Comment on: Antibiotic prophylaxis in cataract surgery – An evidence-based approach

Dear Sir,

We read with interest the article by Haripriya on intracameral antibiotic prophylaxis.[1] Due to the complexity of a clinical trial addressing this issue, it is very improbable that a new one will be carried out.[1,2] Furthermore, as Javitts stated and Haripriya reaffirmed, with the current observational evidence, to assign a patient to the group without intracameral antibiotic could be even ethically questionable.[1] However, a group of American researchers insist that at least two clinical trials are necessary to make a decision.[2]

Recent cumulative evidence taken only from two very large recent observational studies, including the enormous number of almost 7.5 million eyes, unquestionably indicates that intracameral antibiotics are effective [Table 1].[1,3] We have also had a positive experience with intracameral moxifloxacin, initially using undiluted Vigamox® (Alcon) beginning in 2007, and from 2013 undiluted Vigadexa® (Alcon), with zero cases of acute postoperative endophthalmitis.[4] We have had, however, two patients with chronic endophthalmitis. We wonder if Haripriya has also seen cases of chronic postoperative intraocular infection following cataract surgery in eyes with intracameral antibiotics.

We agree with Haripriya and Kovesdy and Kalantar-Zadeh that not always several clinical trials are strictly necessary to gather enough evidence in a medical issue.[1,5] To deny the growing body of evidence on the protective effect of cefuroxime and moxifloxacin administered by intracameral route, merely because no new randomized clinical trials have been made, is too simplistic. Due to these inflexible opinions, it could take a very long time for some ophthalmologists to accept this evidence, until retrospective studies including tens of millions of eyes confirm it again. The sad consequence will be that, meanwhile, hundreds of patients will present this complication without having been able to take advantage of the possibility of reducing their risk with the use of these intracameral antibiotics.

Table 1: Two of the largest retrospective studies on intracameral antibiotic prophylaxis for cataract surgery

Author(s)/ country/ year	Number of eyes	Eyes without IC AB	Incidence of acute POE without IC AB (%)	Eyes with IC AB	Incidence of acute POE with IC AB (%)
Creuzot-Garcher *et al.*,[3]/ France/ 2016	6,371,242	4,680,894	0.12	1,690,348	0.06
Haripriya[1]/ India/2017	1,087,907	532,357	0.07	555,550	0.02
Total	7,459,149	5,213,251	0.11*	2,245,898	0.05*

*Estimated incidence obtained by combining the data from the two studies.
IC AB: Intracameral antibiotics, POE: Postoperative endophthalmitis

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Conflicts of interest

There are no conflicts of interest.

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